



Student Worksheet for **Science on Saturday**

Biodefense: *Detection to Protect the Nation*

Goal: To understand new methods being developed to detect germs before they can cause an epidemic outbreak of potentially deadly infectious disease.

QUESTIONS

1. What is biodefense..?

2. Match the terms in the left column to the correct phrase on the right:

_____ virus	a. discovered the “germ theory” of infectious disease
_____ antibody	b. the body’s own defense against germs
_____ Louis Pasteur	c. any agent which can trigger an immune response
_____ fluorescence	d. requires a host cell to multiply
_____ antibiotic	e. light which is produced from other light energy
_____ Edward Jenner	f. any agent which can cause an infectious disease
_____ immune system	g. tried to infect an innocent child with smallpox
_____ pathogen	h. a protein molecule that can bind to a specific germ
_____ antigen	i. medicine which can stop or kill a bacterial infection

3. True or False..?

- ❖ Infectious disease can kill more people than a nuclear bomb. **T / F**
- ❖ We don’t need to worry about future epidemics, because we have vaccines. **T / F**
- ❖ Our skin is an important defense mechanism against infectious disease. **T / F**
- ❖ A healthy person has up to 1000 different antibodies in their bloodstream. **T / F**
- ❖ Immunoassays are used to detect germs faster than by using lab cultures. **T / F**

4. Fill in the blanks: *P* ___ *V* ___ *NT* ___ *N is the best DEFENSE..!*

5. Would you rather be a scientist, engineer, or physician – and why?